

In claim 31, please replace "claim 1" with --claim 97--.
In claim 33, please replace "claim 1" with --claim 97--.
In claim 34, please replace "claim 1" with --claim 97--.
In claim 35, please replace "claim 1" with --claim 97--.
In claim 36, please replace "claim 1" with --claim 97--.
In claim 37, please replace "claim 1" with --claim 97--.
In claim 38, please replace "claim 1" with --claim 97--.
In claim 39, please replace "claim 1" with --claim 97--.
In claim 40, please replace "claim 1" with --claim 97--.

Please add the following new claims:

--97. A method for treating a nerve-related vision disorder, improving vision, treating memory impairment, or enhancing memory performance in an animal, which comprises administering to said animal an effective amount of a six-membered heterocyclic compound having a single nitrogen heteroatom,

which has an N-linked ketone, diketo, or thioketo substituent, and which is additionally substituted with an ester or amide substituent attached to the heterocyclic ring,

provided that said ester or amide substituent is not an N-oxide of an ester or amide,

wherein the nerve-related vision disorder is selected from the group consisting of visual impairments; orbital disorders; disorders of the lacrimal apparatus; disorders of the eyelids;

disorders of the conjunctiva; disorders of the cornea; cataract; disorders of the uveal tract; disorders of the retina; disorders of the optic nerve or visual pathways; free radical induced eye disorders and diseases; immunologically-mediated eye disorders and diseases; eye injuries; and symptoms and complications of eye disease, eye disorder, and eye injury.

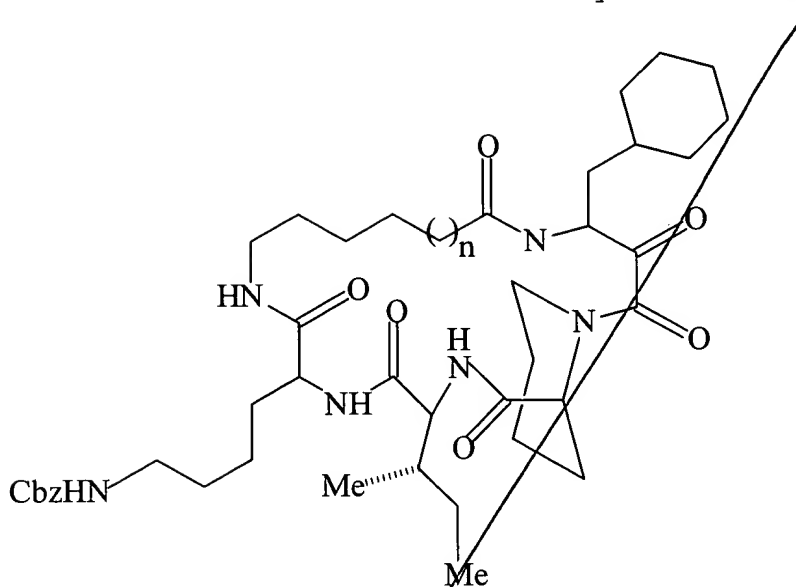
Sub P7 98. The method of claim 97, wherein the compound has an affinity for an FKBP-type immunophilin.

Cont 24 99. The method of claim ~~98~~²³, wherein the FKBP-type immunophilin is FKBP-12.

Sub P7 100. The method of claim 97, wherein the compound is immunosuppressive.

101. The method of claim 97, wherein the compound is non-immunosuppressive.

102. The method of claim 97, wherein the compound is selected from the group consisting of:



wherein n is 1; 2; or 3;

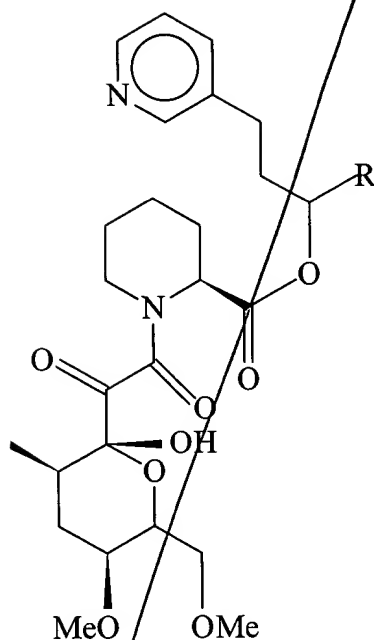
4-(4-methoxyphenyl)butyl (2S)-1-[2-(3,4,5-trimethoxyphenyl)acetyl]hexahydro-2-pyridinecarboxylate;

4-(4-methoxyphenyl)butyl (2S)-1-[2-(3,4,5-trimethoxyphenyl)acryloyl]hexahydro-2-pyridinecarboxylate;

4-(4-methoxyphenyl)butyl (2S)-1-[2-(3,4,5-trimethoxyphenyl)propanoyl]hexahydro-2-pyridinecarboxylate;

4-(4-methoxyphenyl)butyl (2S)-1-[2-oxo-2-(3,4,5-trimethoxyphenyl)acetyl]hexahydro-2-pyridinecarboxylate;

Sub
Dent



3-cyclohexylpropyl (2S)-1-(3,3-dimethyl-2-oxopentanoyl)hexahydro-2-pyridinecarboxylate;

3-phenylpropyl (2S)-1-(3,3-dimethyl-2-oxopentanoyl)hexahydro-2-pyridinecarboxylate;

3-(3,4,5-trimethoxyphenyl)propyl (2S)-1-(3,3-dimethyl-2-oxopentanoyl)hexahydro-2-pyridinecarboxylate;

(1R)-2,2-dimethyl-1-phenethyl-3-butenyl (2S)-1-(3,3-dimethyl-2-oxopentanoyl)hexahydro-2-pyridinecarboxylate;

(1R)-1,3-diphenylpropyl (2S)-1-(3,3-dimethyl-2-oxopentanoyl)hexahydro-2-pyridinecarboxylate;

(1R)-1-cyclohexyl-3-phenylpropyl (2S)-1-(3,3-dimethyl-2-oxopentanoyl)hexahydro-2-pyridinecarboxylate;

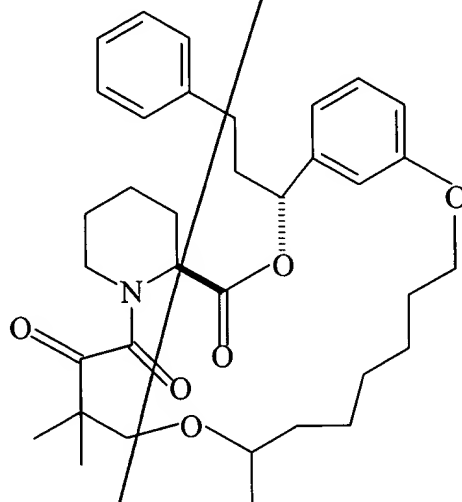
(1S)-1,3-diphenylpropyl (2S)-1-(3,3-dimethyl-2-oxopentanoyl)hexahydro-2-pyridinecarboxylate;

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Sub D's cont
(1S)-1-cyclohexyl-3-phenylpropyl (2S)-1-(3,3-dimethyl-2-oxopentanoyl)hexahydro-2-pyridinecarboxylate;

(22aS)-15,15-dimethylperhydropyrido[2,1-c][1,9,4]dioxazacyclononadecine-1,12,16,17-tetraone;

(24aS)-17,17-dimethylperhydropyrido[2,1-c][1,9,4]dioxazacyclohenicosine-1,14,18,19-tetraone;

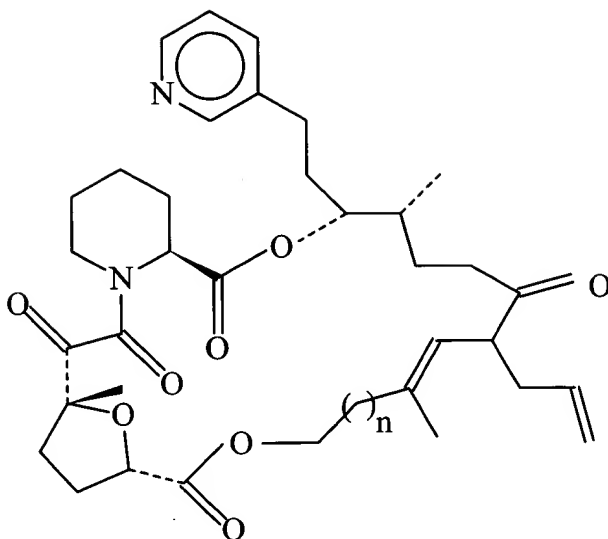


(3R,4R,23aS)-8-allyl-4,10-dimethyl-3-[2-(3-pyridyl)ethyl]-1,3,4,5,6,7,8,11,12,15,16,17,18,20,21,22,23,23a-octadecahydro-14H-pyrido[2,1-c][1,10,4]dioxazacycloicosine-1,7,14,17,18-pentaone;

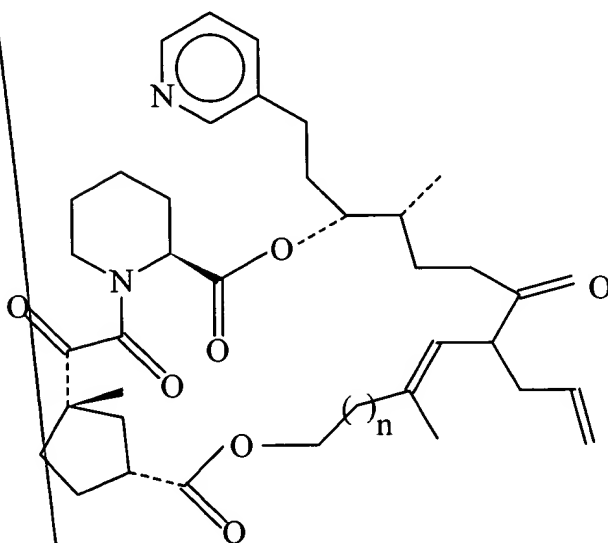
(3R,4R,24aS)-8-allyl-4,10-dimethyl-3-[2-(3-pyridyl)ethyl]-1,3,4,5,6,7,8,11,12,14,15,16,17,18,19,21,22,23, 24,24a-icosahydropyrido[2,1-c][1,11,4]dioxazacyclohenicosine-1,7,14,18,19-pentaone;

(3R,4R,25aS)-8-allyl-4,10-dimethyl-3-[2-(3-pyridyl)ethyl]-1,3,4,5,6,7,8,11,12,15,16,17,18,19,20,22,23, 24,25,25a-icosahydro-14H-pyrido[2,1-c][1,12,4]dioxazacyclodocosine-1,7,14,19,20-

*Sub
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pentaone;

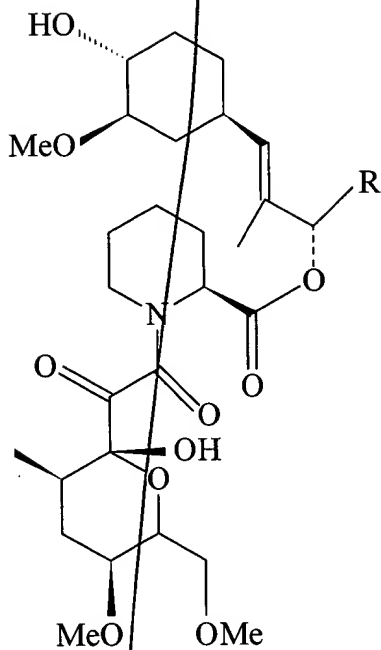


C'cont
wherein n is 1; 2; or 3;

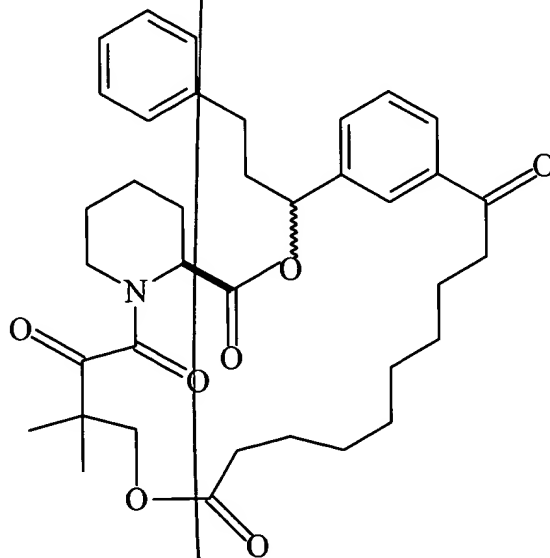


wherein n is 1; 2; or 3;

Sub
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cont



(1R)-1-(3-benzoylphenyl)-3-phenylpropyl (1R)-2-(3,3-dimethyl-2-oxopentanoyl)cyclohexane-1-carboxylate;
(1R)-1-[3-(diallylcarbamoyl)phenyl]-3-phenylpropyl;
(1R)-2-(3,3-dimethyl-2-oxopentanoyl)cyclohexane-1-carboxylate;



ethyl 1-(2-oxo-3-phenylpropanoyl)-2-piperidinecarboxylate;

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Sub 198 cont.

ethyl 1-pyruvoyl-2-piperidinecarboxylate;
ethyl 1-(2-oxobutanoyl)-2-piperidinecarboxylate;
ethyl 1-(3-methyl-2-oxobutanoyl)-2-piperidinecarboxylate;
ethyl 1-(4-methyl-2-oxopentanoyl)-2-piperidinecarboxylate;
ethyl 1-(3,3-dimethyl-2-oxobutanoyl)-2-piperidinecarboxylate;
ethyl 1-(3,3-dimethyl-2-oxopentanoyl)-2-piperidinecarboxylate;
4-[2-(ethyloxycarbonyl)piperidino]-2,2-dimethyl-3,4-dioxobutyl
acetate;
C' cont.
ethyl 1-[2-(2-hydroxytetrahydro-2H-2-pyranyl)-2-oxoacetyl]-2-
piperidinecarboxylate;
ethyl 1-[2-(2-methoxytetrahydro-2H-2-pyranyl)-2-oxoacetyl]-2-
piperidinecarboxylate;
ethyl 1-[2-(1-hydroxycyclohexyl)-2-oxoacetyl]-2-
piperidinecarboxylate;
ethyl 1-[2-(1-methoxycyclohexyl)-2-oxoacetyl]-2-
piperidinecarboxylate;
ethyl 1-(2-cyclohexyl-2-oxoacetyl)-2-piperidinecarboxylate;
ethyl 1-(2-oxo-2-piperidinoacetyl)-2-piperidinecarboxylate;
ethyl 1-[2-(3,4-dihydro-2H-6-pyranyl)-2-oxoacetyl]-2-
piperidinecarboxylate;
ethyl 1-(2-oxo-2-phenylacetyl)-2-piperidinecarboxylate;
ethyl 1-(4-methyl-2-oxo-1-thioxopentyl)-2-piperidinecarboxylate;
3-phenylpropyl 1-(2-hydroxy-3,3-dimethylpentanoyl)-2-
piperidinecarboxylate;

Sub D8 cont
(1R)-1-phenyl-3-(3,4,5-trimethoxyphenyl)propyl 1-(3,3-dimethylbutanoyl)-2-piperidinecarboxylate;

(1R)-1,3-diphenylpropyl 1-(benzylsulfonyl)-2-piperidinecarboxylate;
3-(3,4,5-trimethoxyphenyl)propyl 1-(benzylsulfonyl)-2-piperidinecarboxylate;

1-(2-[(2R,3R,6S)-6-[(2S,3E,5E,7E,9S,11R)-2,13-dimethoxy-3,9,11-trimethyl-12-oxo-3,5,7-tridecatrienyl]-2-hydroxy-3-methyltetrahydro-2H-2-pyranyl)-2-oxoacetyl)-2-piperidinecarboxylic acid;

C' cont
methyl 1-(2-[(2R,3R,6S)-6-[(2S,3E,5E,7E,9S,11R)-2,13-dimethoxy-3,9,11-trimethyl-12-oxo-3,5,7-tridecatrienyl]-2-hydroxy-3-methyltetrahydro-2H-2-pyranyl)-2-oxoacetyl)-2-piperidinecarboxylate;

isopropyl 1-(2-[(2R,3R,6S)-6-[(2S,3E,5E,7E,9S,11R)-2,13-dimethoxy-3,9,11-trimethyl-12-oxo-3,5,7-tridecatrienyl]-2-hydroxy-3-methyltetrahydro-2H-2-pyranyl)-2-oxoacetyl)-2-piperidinecarboxylate;

benzyl 1-(2-[(2R,3R,6S)-6-[(2S,3E,5E,7E,9S,11R)-2,13-dimethoxy-3,9,11-trimethyl-12-oxo-3,5,7-tridecatrienyl]-2-hydroxy-3-methyltetrahydro-2H-2-pyranyl)-2-oxoacetyl)-2-piperidinecarboxylate;

1-phenylethyl 1-(2-[(2R,3R,6S)-6-[(2S,3E,5E,7E,9S,11R)-2,13-dimethoxy-3,9,11-trimethyl-12-oxo-3,5,7-tridecatrienyl]-2-hydroxy-

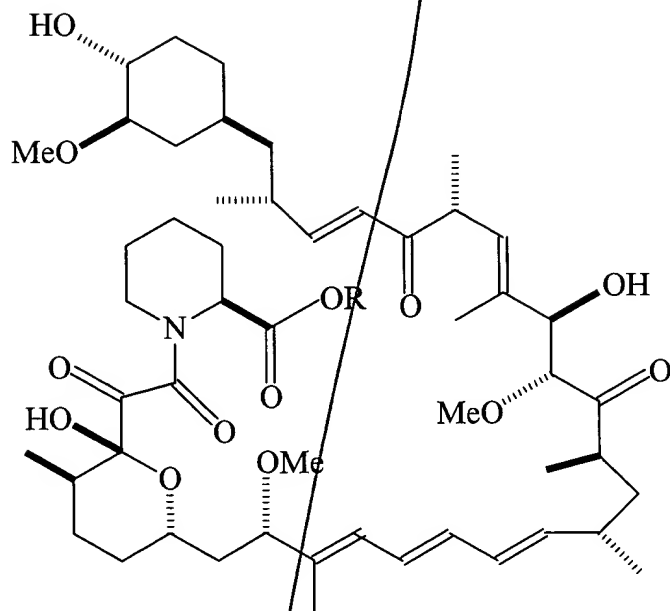
Sub
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cont (3-methyltetrahydro-2H-2-pyranyl)-2-oxoacetyl)-2-piperidinecarboxylate;

(Z)-3-phenyl-2-propenyl 1-(2-[(2R,3R,6S)-6-[(2S,3E,5E,7E,9S,11R)-2,13-dimethoxy-3,9,11-trimethyl-12-oxo-3,5,7-tridecatrienyl]-2-hydroxy-3-methyltetrahydro-2H-2-pyranyl)-2-oxoacetyl)-2-piperidinecarboxylate;

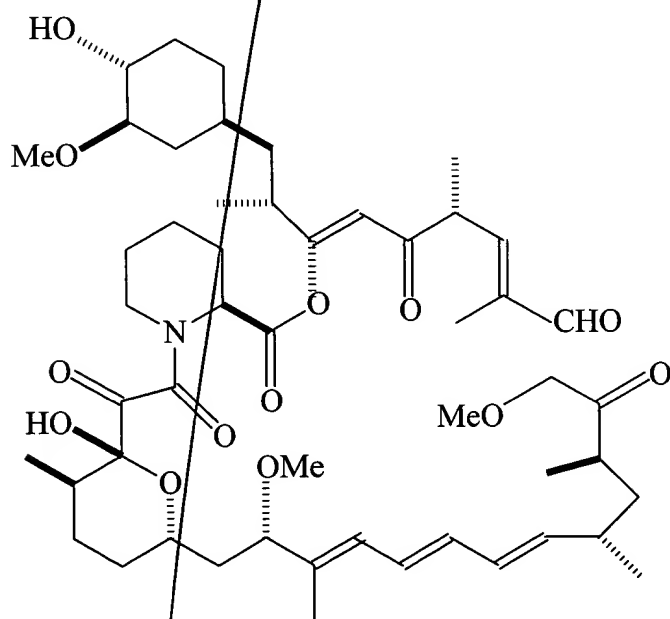
C1 cont 3-(3,4-dimethoxyphenyl)propyl 1-(2-[(2R,3R,6S)-6-[(2S,3E,5E,7E,9S,11R)-2,13-dimethoxy-3,9,11-trimethyl-12-oxo-3,5,7-tridecatrienyl]-2-hydroxy-3-methyltetrahydro-2H-2-pyranyl)-2-oxoacetyl)-2-piperidinecarboxylate;

N2-benzyl-1-(2-[(2R,3R,6S)-6-[(2S,3E,5E,7E,9S,11R)-2,13-dimethoxy-3,9,11-trimethyl-12-oxo-3,5,7-tridecatrienyl]-2-hydroxy-3-methyltetrahydro-2H-2-pyranyl)-2-oxoacetyl)-2-piperidinecarboxylate;

N2-(3-phenylpropyl)-1-(2-[(2R,3R,6S)-6-[(2S,3E,5E,7E,9S,11R)-2,13-dimethoxy-3,9,11-trimethyl-12-oxo-3,5,7-tridecatrienyl]-2-hydroxy-3-methyltetrahydro-2H-2-pyranyl)-2-oxoacetyl)-2-piperidinecarboxylate;

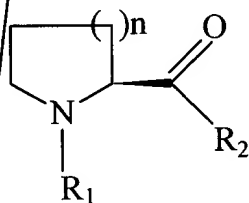
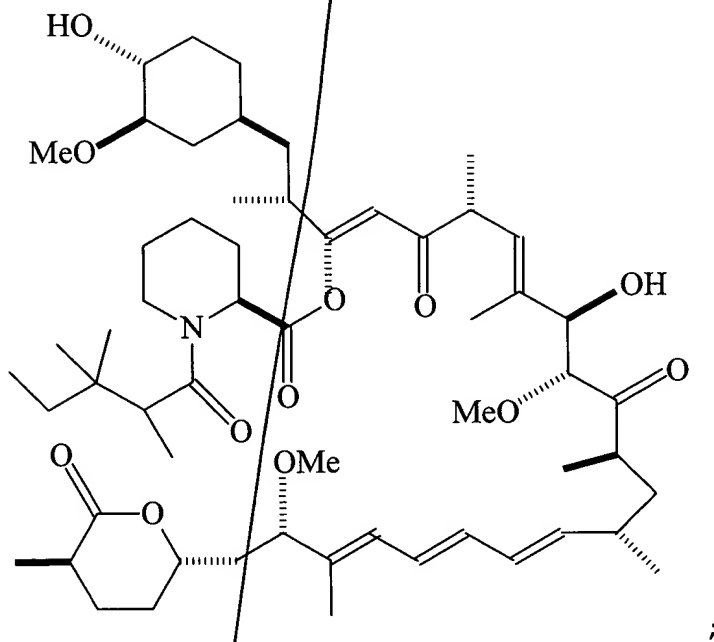


wherein R is methyl (Me); or benzyl (Bn);



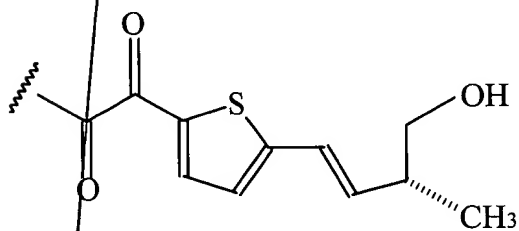
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C' cont

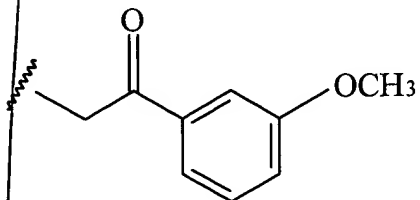


wherein $n = 2$,

$R_1 =$



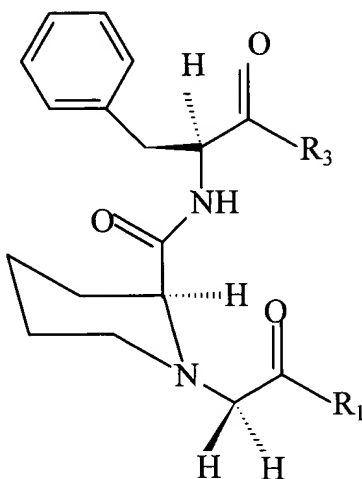
or



C

and

$R_2 = \text{Phe-o-tert-butyl};$



wherein

$R_1 = m\text{-OCH}_3\text{Ph},$

$R_1 = m\text{-OCH}_3\text{Ph},$

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$R_1 = m\text{-OCH}_3\text{Ph},$

$R_1 = m\text{-OCH}_3\text{Ph},$

$R_1 = \text{B-naphthyl},$

$R_3 = \text{Val-o-tert-butyl};$

$R_3 = \text{Leu-o-tert-butyl};$

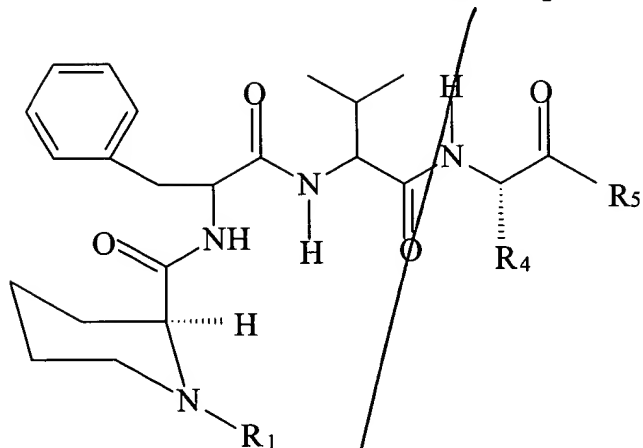
$R_3 = \text{Ileu-o-tert-butyl};$

$R_3 = \text{hexahydro-Phe-o-tert-butyl};$

$R_3 = \text{allylalanine-o-tert-butyl};$

$R_3 = \text{Val-o-tert-butyl};$

*Sub
D₁
cont*



wherein $R_1 = \text{CH}_2(\text{CO})-\text{m}-\text{OCH}_3\text{Ph}$

$R_4 = \text{CH}_2\text{Ph}$

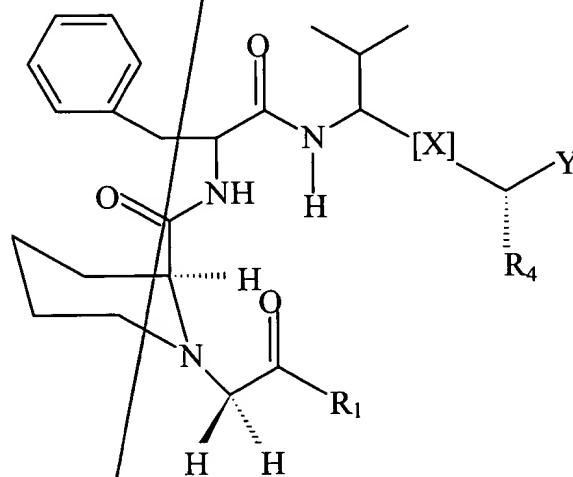
$R_5 = \text{OCH}_3;$

or

$R_1 = \text{CH}_2(\text{CO})-\text{B-naphthyl}$

$R_4 = \text{CH}_2\text{Ph}$

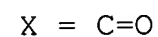
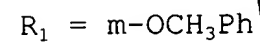
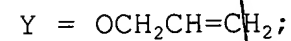
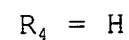
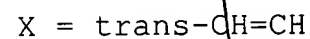
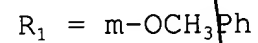
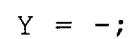
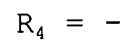
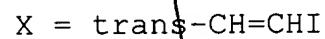
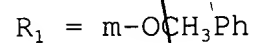
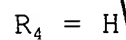
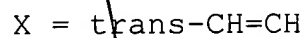
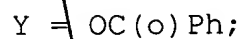
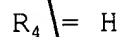
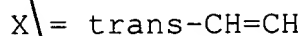
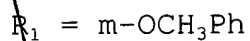
$R_5 = \text{OCH}_3;$



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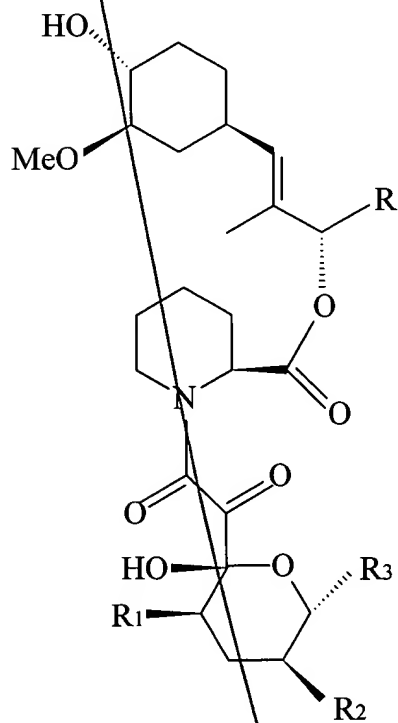
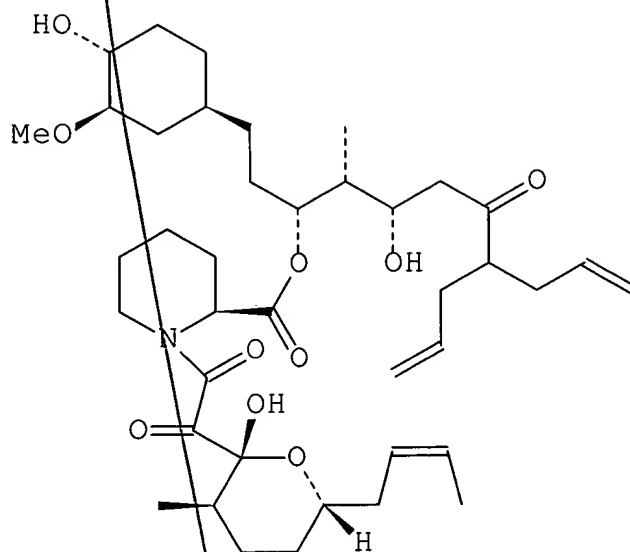
*Sub
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cont*

wherein



*Sub
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cont*

$R_4 = H$
 $Y = Ph;$



*Sub
108
cont*

wherein

$R_1 = H, \quad R_2 = OMe, \text{ and } R_3 = CH_2OMe;$

$R_1 = H, \quad R_2 = H, \text{ and } R_3 = H;$

$R_1 = Me, \quad R_2 = H, \text{ and } R_3 = H;$

Cont

(E)-3-(3,4-dichlorophenyl)-2-propenyl 1-(3,3-dimethyl-2-oxopentanoyl)-2-piperidinecarboxylate;

(E)-3-(3,4,5-trimethoxyphenyl)-2-propenyl 1-(3,3-dimethyl-2-oxopentanoyl)-2-piperidinecarboxylate;

(E)-3-phenyl-2-propenyl 1-(3,3-dimethyl-2-oxopentanoyl)-2-piperidinecarboxylate;

(E)-3-((3-(2,5-dimethoxy)-phenylpropyl)phenyl)-2-propenyl 1-(3,3-dimethyl-2-oxopentanoyl)-2-piperidinecarboxylate;

4-(4-methoxyphenyl)butyl 1-(2-oxo-2-phenylacetyl)-2-piperidinecarboxylate;

3-phenylpropyl 1-(2-oxo-2-phenylacetyl)-2-piperidinecarboxylate;

3-(3-pyridyl)propyl 1-(2-oxo-2-phenylacetyl)-2-piperidinecarboxylate;

3-(3-pyridyl)propyl 1-(3,3-dimethyl-2-oxopentanoyl)-2-piperidinecarboxylate;

4-phenyl-1-(3-phenylpropyl)butyl 1-(3,3-dimethyl-2-oxopentanoyl)-2-piperidinecarboxylate;

4-(4-methoxyphenyl)butyl 1-(3,3-dimethyl-2-oxopentanoyl)-2-

*Sub
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piperidinecarboxylate;

1-(4-methoxyphenethyl)-4-phenylbutyl 1-(3,3-dimethyl-2-oxopentanoyl)-2-piperidinecarboxylate;

3-(2,5-dimethoxyphenyl)propyl 1-(3,3-dimethyl-2-oxopentanoyl)-2-piperidinecarboxylate;

3-(1,3-benzodioxol-5-yl)propyl 1-(3,3-dimethyl-2-oxopentanoyl)-2-piperidinecarboxylate;

1-phenethyl-3-phenylpropyl 1-(3,3-dimethyl-2-oxopentanoyl)-2-piperidinecarboxylate;

Col cont
4-(4-methoxyphenyl)butyl 1-(2-cyclohexyl-2-oxoacetyl)-2-piperidinecarboxylate;

3-cyclohexylpropyl 1-(2-cyclohexyl-2-oxoacetyl)-2-piperidinecarboxylate;

3-phenylpropyl 1-(2-cyclohexyl-2-oxoacetyl)-2-piperidinecarboxylate;

3-cyclohexylpropyl 1-(3,3-dimethyl-2-oxobutanoyl)-2-piperidinecarboxylate;

3-phenylpropyl 1-(3,3-dimethyl-2-oxobutanoyl)-2-piperidinecarboxylate;

4-(4-methoxyphenyl)butyl 1-(3,3-dimethyl-2-oxobutanoyl)-2-piperidinecarboxylate; and

4-phenyl-1-(3-phenylpropyl)butyl 1-(3,3-dimethyl-2-oxobutanoyl)-2-piperidinecarboxylate; or